Glossary & Acronyms



Guide by Cell stop near the Esker Brook Trails

Glossary & Acronyms

Glossary

accessibility

the state or quality of being easily approached or entered, particularly as it relates to complying with the Americans With Disabilities Act

accessible facilities

structures accessible for most people with disabilities without assistance; facilities that meet UFAS standards; ADA-accessible [e.g., parking lots, trails, pathways, ramps, picnic and camping areas, restrooms, boating facilities (docks, piers, gangways), fishing facilities, playgrounds, amphitheaters, exhibits, audiovisual programs, and wayside sites.]

adaptation

adjustment to environmental conditions

adaptive management

focuses on learning and adapting, through partnerships of managers, scientists, and other stakeholders who learn together how to create and maintain sustainable ecosystems. Adaptive management: helps science managers maintain FLEXIBILITY in their decisions, knowing that uncertainties exist and provides managers the latitude to change direction will improve UNDERSTANDING of ecological systems to achieve management objectives is about taking ACTION to improve progress towards desired outcomes. (Source: Williams, B. K., R. C. Szaro, and C. D. Shapiro. 2007. Adaptive Management: The U.S. Department of the Interior Technical Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.)

aggregate

many parts considered together as a whole

agricultural land

open land, now or recently orchards, pastures, or crops

alternative

a reasonable way to fix an identified problem or satisfy a stated need [40 CFR 1500.2 (see"management alternative")]

appropriate use

a proposed or existing use on a refuge that meets at least one of the following three conditions:

- 1. the use is a wildlife-dependent one;
- 2. the use contributes to fulfilling the refuge purpose(s), the System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the National Wildlife Refuge System Improvement Act was signed into law; or

3. the use has been determined appropriate as specified in section 1.11 of that act.

approved acquisition boundary

a project boundary that the Director of the U.S. Fish and Wildlife Service approves upon completion of the planning and environmental compliance process. An approved acquisition boundary only designates those lands which the Service has authority to acquire or manage through various agreements. The approval of an acquisition boundary does not grant the Service jurisdiction or control over lands within the boundary, and it does not make lands within the refuge boundary part of the National Wildlife Refuge System. Lands do not become part of the System until the Service buys them or they are placed under an agreement that provides for their management as part of the System.

anadromous fish

from the Greek, literally "up-running;" fish that spend a large portion of their life cycle in the ocean and return to freshwater to breed

aquatic

growing in, living in, or dependent upon water

aquatic barrier

any obstruction to fish passage

area of biological significance

see "special focus area"

avian

of or having to do with birds

avifauna

all birds of a given region

barrier

see "aquatic barrier"

basin

the land surrounding and draining into a water body (see"watershed")

benthic

living at, in, or associated with structures on the bottom of a body of water

wate.

best management practices

land management practices that produce desired results [Note: Usually describing forestry or agricultural practices effective in reducing nonpoint source pollution, like reseeding skidder trails or not storing manure in a flood plain. In their broader sense, practices that benefit target species.]

biological diversity or biodiversity

the variety of life and its processes and includes the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur

biological integrity

biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that shape genomes, organisms and communities

biodiversity conservation

the goal of conservation biology, which is to retain indefinitely as much of the earth's biodiversity as possible, with emphasis on biotic elements most vulnerable to human impacts

biota

the plant and animal life of a region

breeding habitat

habitat used by migratory birds or other animals during the breeding season

buffer species

alternate prey species exploited by predators when a more preferred prey is in relatively short supply; i.e., if rabbits are scarce, foxes will exploit more abundant rodent populations

buffer zones

land bordering and protecting critical habitats or water bodies by reducing runoff and nonpoint source pollution loading; areas created or sustained to lessen the negative effects of land development on animals, plants, and their habitats

candidate species

plants and animals for which the U.S. Fish and Wildlife Service has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities (Source: http://www.fws.gov/endangered/factsheets/candidate_species.pdf)

canopy

the layer of foliage formed by the crowns of trees in a stand. For stands with trees of different heights, foresters often distinguish among the upper, middle and lower canopy layers. These represent foliage on tall, medium, and short trees. The uppermost layers are called the overstory.

categorical exclusion (CE, CX, CATEX)

pursuant to the National Environmental Policy Act (NEPA), a category of Federal agency actions that do not individually or cumulatively have a significant effect on the human environment [40 CFR 1508.4]

CFR

the Code of Federal Regulations

community

the locality in which a group of people resides and shares the same

government

community type

a particular assemblage of plants and animals, named for its dominant

characteristic

compatible use

"The term 'compatible use' means a wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the mission of the System or the purposes of the refuge."—National Wildlife Refuge System Improvement Act of 1997 [Public Law 105-57; 111 Stat. 1253]

compatibility determination

a required determination for wildlife-dependent recreational uses or

any other public uses of a refuge

comprehensive conservation plan

(CCP) mandated by the 1997 Refuge Improvement Act, a document that provides a description of the desired future conditions and long-range guidance for the project leader to accomplish purposes of the refuge system and the refuge. CCPs establish management direction to achieve refuge purposes. [P.L. 105-57; FWS Manual 602 FW 1.4]

concern see "issue"

conifer a tree or shrub in the phylum Gymnospermae whose seeds are borne in

woody cones.

connectivity community occurrences and reserves have permeable boundaries and

thus are subject to inflows and outflows from the surrounding

landscape. Connectivity in the selection and design of nature reserves relates to the ability of species to move across the landscape to meet basic habitat requirements. Natural connecting features within the ecoregion may include river channels, riparian corridors, ridgelines, or migratory pathways.

conservation

managing natural resources to prevent loss or waste [Note: Management actions may include preservation, restoration, and

enhancement.]

conservation agreements

written agreements among two or more parties for the purpose of ensuring the survival and welfare of unlisted species of fish and wildlife or their habitats or to achieve other specified conservation goals. Participants voluntarily commit to specific actions that will remove or reduce threats to those species.

conservation easement

a nonpossessory interest in real property owned by another imposing limitations or affirmative obligations with the purpose of returning or protecting the property's conservation values

conservation status

assessment of the status of ecological processes and of the viability of species or populations in an ecoregion

consultation

a type of stakeholder involvement in which decision makers ask stakeholders to comment on proposed decisions or actions

cool-season grass

an introduced grass for crop and pastureland that grows in spring and fall and is dormant during hot summer months

cooperative agreement

a usually long-term habitat protection action, which can be modified by either party, in which no property rights are acquired. Lands under a cooperative agreement do not necessarily become part of the National Wildlife Refuge System.

critical habitat

according to U.S. Federal law, the ecosystems upon which endangered and threatened species depend

cultural resources

these consist of above-ground, architectural resources (structures), below-ground, archaeological resources (Native American or historical sites), artifacts, and other resources to which the criteria of eligibility for listing in the National Register of Historic Places may be applied. These resources are subject to protection under the National Historic

Preservation Act (NHPA) and other applicable laws and regulations.

cultural resource overview

a comprehensive document prepared for a field office that discusses, among other things, project prehistory and cultural history, the nature and extent of known cultural resources, previous research, management objectives, and archaeological sensitivity (i.e., the likelihood for unrecorded sites) on a refuge-wide basis.

[An overview should reference or incorporate information from a field offices background or literature search described in section VIII of the Cultural Resource Management Handbook (FWS Manual 614 FW 1.7).]

database

a collection of data arranged for ease and speed of analysis and retrieval, usually computerized

dedicated open space

land to be held as open space forever

degradation

the loss of native species and processes due to human activities such that only certain components of the original biodiversity persist, often including significantly altered natural communities

designated wilderness area

an area designated by Congress as part of the National Wilderness Preservation System [FWS Manual 610 FW 1.5 (draft)]

desired future condition

the qualities of an ecosystem or its components that an organization seeks to develop through its decisions and actions

digitizing

the process of converting maps into geographically referenced electronic files for a geographic information system (GIS)

distribution pattern

the overall pattern of occurrence for a particular conservation target. In ecoregional planning projects, often referred to as the relative proportion of the target's natural range occurring within a given ecoregion (e.g., endemic, limited, widespread, disjunct, peripheral).

disturbance

any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment

donation

a citizen or group may wish to give land or interests in land to the Service for the benefit of wildlife. Aside from the cost factor, these acquisitions are no different than any other means of land acquisition. Gifts and donations have the same planning requirements as purchases.

easement

a non-possessory interest in real property that permits the holder to use another's land for a specified purpose. It may also impose limitations or affirmative obligations on the holder of the land subject to the easement. An agreement by which landowners give up or sell one of the rights on their property [e.g., landowners may donate rights-of-way across their properties to allow community members access to a river (see"conservation easement").]

ecological integrity

native species populations in their historic variety and numbers naturally interacting in naturally structured biotic communities. For communities, integrity is governed by demographics of component species, intactness of landscape-level ecological processes (e.g., natural fire regime), and intactness of internal community processes (e.g., pollination).

ecological processes

a complex mix of interactions among animals, plants, and their environment that ensures maintenance of an ecosystem's full range of biodiversity. Examples include population and predator-prey dynamics, pollination and seed dispersal, nutrient cycling, migration, and dispersal

ecoregion

a territory defined by a combination of biological, social, and geographic criteria, rather than geopolitical considerations; generally, a system of related, interconnected ecosystems

ecosystem

a natural community of organisms interacting with its physical environment, regarded as a unit

ecotourism

visits to an area that maintains and preserves natural resources as a basis for promoting its economic growth and development

edge effect

the phenomenon whereby edge-sensitive species are negatively affected near edges by factors that include edge-generalist species, human influences, and abiotic factors associated with habitat edges. Edge effects are site-specific and factor-specific and have variable depth effects into habitat fragments.

emergent wetland

wetlands dominated by erect, rooted, herbaceous plants

endangered species

a Federal- or State-listed protected species in danger of extinction

throughout all or a significant portion of its range

endemic

a species or race native to a particular place and found only there

environment

the sum total of all biological, chemical, and physical factors to which

organisms are exposed

environmental education

curriculum-based education aimed at producing a citizenry that is knowledgeable about the biophysical environment and its associated problems, aware of how to help solve those problems, and motivated to

work toward solving them

environmental health the composition, structure, and functioning of soil, water, air, and other abiotic features comparable with historic conditions, including the

natural abiotic processes that shape the environment

environmental assessment

(EA) a public document that discusses the purpose and need for an action, its alternatives, and provides sufficient evidence and analysis of its impacts to determine whether to prepare an environmental impact statement or a finding of no significant impact (q.v.) [see also 40 CFR

1508.9]

environmental impact statement

(EIS) a detailed, written analysis of the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources [see also 40

CFR 1508.11]

eutrophic

a body of water (lake, pond, etc.) rich in mineral and organic nutrients that support an abundance of plant life, particularly algae, which reduces the dissolved oxygen content and may cause the extinction of other organisms

evaluation

examination of how an organization's plans and actions have turned

out—and adjusting them for the future.

exemplary community type

an outstanding example of a particular community type

extinction

the termination of any lineage of organisms, from subspecies to species

and higher taxonomic categories from genera to phyla.

extirpated

status of a species or population that has completely vanished from a

given area but that continues to exist in some other location

exotic species

a species that is not native to an area and has been introduced intentionally or unintentionally by humans; not all exotics become

successfully established

fauna

all animal life associated with a given habitat, country, area or period

Federal land

public land owned by the Federal Government, including national

forests, national parks, and national wildlife refuges

Federal trust resources

a resource that the Government holds in trust for the people through

law or administrative act

[Note: A Federal trust resource is one for which responsibility is given wholly or in part to the Federal Government by law or administrative act. Generally, Federal trust resources are nationally or internationally important no matter where they occur, like endangered species or migratory birds and fish that regularly move across state lines. They also include cultural resources protected by Federal historic preservation laws, and nationally important or threatened habitats, notably wetlands, navigable waters, and public lands like state parks

and national wildlife refuges.]

federally listed species

a species listed either as endangered, threatened, or a species at risk (formerly, a "candidate species") under the Endangered Species Act of

1973, as amended

fee title acquisition

the acquisition of most or all of the rights to a tract of land; a total transfer of property rights with the formal conveyance of a title. While a fee-title acquisition involves most rights to a property, certain rights may be reserved or not purchased, including water rights, mineral rights, or use reservation (e.g., the ability to continue using the land for a specified time period, such as the remainder of the owner's life).

Finding of No Significant Impact (FONSI) supported by an environmental assessment, a document that briefly presents why a Federal action will have no significant effect on the human environment, and for which an environmental impact statement, therefore, will not be prepared [40 CFR 1508.13]

fire regime the characteristic frequency, intensity, and spatial distribution of

natural fires within a given ecoregion or habitat

flora all the plants found in a particular place

floodplain flat or nearly flat land that may be submerged by floodwaters; a plain

built up or in the process of being built up by stream deposition

flyway any one of several established migration routes of birds

focal species a species that is indicative of particular conditions in a system (ranging

from natural to degraded) and used as a surrogate measure for other species of particular conditions. An element of biodiversity selected as a focus for conservation planning or action. The two principal types of targets in Conservancy planning projects are species and ecological

communities.

focus areas see "special focus areas"

forested land land dominated by trees. (For impacts analysis in CCPs, we assume all

> forested land has the potential for occasional harvesting; we assume forested land owned by timber companies is harvested on a more

intensive, regular schedule.)

forested wetlands wetlands dominated by tree

fracking see "hydraulic fracturing"

fragmentation the disruption of extensive habitats into isolated and small patches.

> Fragmentation has two negative components for biota: the loss of total habitat area; and, the creation of smaller, more isolated patches of

habitat remaining.

geographic

(GIS) a computerized system to compile, store, analyze and display geographically referenced information [e.g., GIS can overlay multiple information system

sets of information on the distribution of a variety of biological and

physical features.]

the legal instrument used when the principal purpose of the transaction grant agreement

> is the transfer of money, property, services, or anything of value to a recipient in order to accomplish a public purpose of support or

> stimulation authorized by Federal statute and substantial involvement

between the Service and the recipient is not anticipated (see also "cooperative agreement") (Grants and Cooperative Agreement Act at 31 U.S.C. § 6305)

grassland

a habitat type with landscapes dominated by grasses and with biodiversity characterized by species with wide distributions, communities being relatively resilient to short-term disturbances but not to prolonged, intensive burning or grazing. In such systems, larger vertebrates, birds, and invertebrates display extensive movement to track seasonal or patchy resources.

groundwater

water in the ground that is in the zone of saturation, from which wells and springs and groundwater runoff are supplied

guild

a group of organisms, not necessarily taxonomically related, that are ecologically similar in characteristics such as diet, behavior, or microhabitat preference, or with respect to their ecological role in general

habitat

the place or type of site where species and species assemblages are typically found and/or successfully reproduce [Note: An organism's habitat must provide all of the basic requirements for life, and should be free of harmful contaminants.]

habitat block

a landscape-level variable that assesses the number and extent of blocks of contiguous habitat, taking into account size requirements for populations and ecosystems to function naturally. It is measured here by a habitat-dependent and ecoregion size-dependent system.

habitat conservation

protecting an animal or plant habitat to ensure that the use of that habitat by the animal or plant is not altered or reduced

habitat fragmentation

the breaking up of a specific habitat into smaller, unconnected areas [Note: A habitat area that is too small may not provide enough space to maintain a breeding population of the species in question.]

historic conditions

the composition, structure and functioning of ecosystems resulting from natural processes that we believe, based on sound professional judgment, were present prior to substantial human-related changes to the landscape

hydraulic fracturing

the fracturing of rock at depth with fluid pressure. Hydraulic fracturing at depth may be accomplished by pumping water into a well at very

high pressures.

hydrologic or flow regime

characteristic fluctuations in river flows

hydrology

the science of waters of the earth: their occurrences, distributions, and circulations; their physical and chemical properties; and their reactions with the environment, including living beings

hydroperiod

the length of time and portion of year the wetland holds ponded water

impoundment

a body of water, such as a pond, confined by a dam, dike, floodgate, or other barrier, which is used to collect and store water for future use

indicator species

a species used as a gauge for the condition of a particular habitat, community, or ecosystem. A characteristic or surrogate species for a community or ecosystem.

indigenous

native to an area

indigenous species

a species that, other than a result as an introduction, historically occurred or currently occurs in a particular ecosystem

interpretive facilities

structures that provide information about an event, place, or thing by a variety of means, including printed, audiovisual, or multimedia materials [e.g., kiosks that offer printed materials and audiovisuals, signs, and trail heads.]

interpretive materials

any tool used to provide or clarify information, explain events or things, or increase awareness and understanding of the events or things [e.g., printed materials like brochures, maps or curriculum materials; audio/visual materials like video and audio tapes, films, or slides; and, interactive multimedia materials, CD-ROM or other computer

technology.]

invasive species

a nonnative species whose introduction causes or is likely to cause economic or environmental harm or harm to human health

inventory

a list of all the assets and liabilities of an organization, including physical, financial, personnel, and procedural aspects

Glos-12

invertebrate any animal lacking a backbone or bony segment that encloses the

central nerve cord

issue any unsettled matter that requires a management decision [e.g., a

Service initiative, an opportunity, a management problem, a threat to the resources of the unit, a conflict in uses, a public concern, or the

presence of an undesirable resource condition.]

[Note: A CCP should document, describe, and analyze issues even if they cannot be resolved during the planning process (FWS Manual 602

FW 1.4).]

land protection plan

(LPP) a document that identifies and prioritizes lands for potential Service acquisition from a willing seller, and also describes other methods of providing protection. Landowners within project boundaries will find this document, which is released with environmental assessments, most useful.

land trusts organizations dedicated to conserving land by purchase, donation, or

conservation easement from landowners

landform the physical shape of the land reflecting geologic structure and

processes of geomorphology that have sculpted the structure

landscape a heterogeneous land area composed of a cluster of interacting

ecosystems that are repeated in similar form throughout

landscape approach an approach to managing for species communities that focuses on

landscape patterns rather than processes and manages landscape elements to collectively influence groups of species in a desired direction. This approach assumes that by managing a landscape for its

components, the naturally occurring species will persist.

large patch communities that form large areas of interrupted cover. Individual

occurrences of this community type typically range in size from 20 to

2,000 hectares. Large patch communities are associated with

environmental conditions that are more specific than those of matrix communities, and that are less common or less extensive in the

landscape. Like matrix communities, large patch communities are also influenced by large-scale processes, but these tend to be modified by

specific site features that influence the community.

late-successional species, assemblages, structures, and processes associated with mature

natural communities that have not experienced significant disturbance

for a long time

limiting factor an environmental limitation that prevents further population growth

limits of acceptable change

a planning and management framework for establishing and maintaining acceptable and appropriate environmental and social

conditions in recreation settings

management alternative

a set of objectives and the strategies needed to accomplish each

objective [FWS Manual 602 FW 1.4]

management concern

see "issue" and "migratory nongame birds of management concern"

management opportunity

see "issue"

management strategy

a general approach to meeting unit objectives

[Note: A strategy may be broad, or it may be detailed enough to guide implementation through specific actions, tasks, and projects (FWS

Manual 602 FW 1.4).]

marshlands areas interspersed with open water, emergent vegetation (hydrophytes),

and terrestrial vegetation (phreatophytes)

matrix forming (or matrix community)

communities that form extensive and contiguous cover may be categorized as matrix (or matrix-forming) community types. Matrix communities occur on the most extensive landforms and typically have wide ecological tolerances. They may be characterized by a complex mosaic of successional stages resulting from characteristic disturbance processes (e.g., New England northern hardwood-conifer forests). Individual occurrences of the matrix type typically range in size from 2000 to 500,000 hectares. In a typical ecoregion, the aggregate of all matrix communities covers, or historically covered, as much as 75-80 percent of the natural vegetation of the ecoregion. Matrix community types are often influenced by large-scale processes (e.g., climate patterns, fire), and are important habitat for wide-ranging or large area-

dependent fauna, such as large herbivores or birds.

mesic a type of habitat characterized by a moderate or well-balanced supply

of moisture

mesotrophic a body of water (lake, pond, etc.) having a moderate amount of plant

growth

migratory nongame

birds of management concern species of nongame birds that (a) are believed to have undergone significant population declines; (b) have small or restricted

populations; or (c) are dependent upon restricted or vulnerable habitats

mission statement a succinct statement of the purpose for which the unit was established;

its reason for being

mitigation actions to compensate for the negative effects of a particular project

[e.g., wetland mitigation usually restores or enhances a previously

damaged wetland or creates a new wetland.]

monoculture when one species dominates over all other species. It refers to an area

that is covered primarily or solely by one plant species. In agriculture and forestry, it refers to the planting of only one crop type or tree species over a large area. Also used to describe dense stands of invasive or exotic plants that have out-competed and excluded native

plants.

mosaic an interconnected patchwork of distinct vegetation types

National Environmental Policy Act of 1969 (NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in planning and implementing environmental actions. [Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents to facilitate better environmental decisionmaking (see also 40 CFR 1500).]

National Wildlife Refuge System (Refuge System) all lands and waters and interests therein administered by the Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas managed to preserve a national network for the conservation and management of fish, wildlife and plant resources of the United States, for the benefit of present and future generations (National Wildlife Refuge System Improvement Act, 16 USC 668dd)

native a species that, other than as a result of an introduction, historically

occurred or currently occurs in a particular ecosystem

native plant a plant that has grown in the region since the last glaciation, and

occurred before European settlement

natural disturbance

event

any natural event that significantly alters the structure, composition, or

dynamics of a natural community: e.g., floods, fires, and storms

natural range of

variation

a characteristic range of levels, intensities, and periodicities associated with disturbances, population levels, or frequency in undisturbed

habitats or communities

neotropical migrant birds, bats, or invertebrates that seasonally migrate between the

Nearctic and Neotropics

nonconsumptive, wildlife-oriented recreation

wildlife observation and photography and environmental education and

interpretation (see also "wildlife-oriented recreation")

nonnative species see "exotic species"

nonnative, invasive

species

nonnative species that has been introduced into an area and, because of its aggressive growth and lack of natural predators, displace native

species

nonpoint source

pollution

a diffuse form of water quality degradation in which wastes are not released at one specific, identifiable point but from a number of points

that are spread out and difficult to identify and control

non-forested wetlands

wetlands dominated by shrubs or emergent vegetation

nonpoint source

a diffuse form of water quality degradation produced by erosion of land that causes sedimentation of streams, eutrophication from nutrients and pesticides used in agricultural and silvicultural practices, and acid rain

resulting from burning fuels that contain sulfur

Notice of Availability

(NOA) an announcement we publish in the Federal Register that we have prepared an environmental impact statement or an environmental assessment and that it is available for public review and comment

Notice of Intent (NOI) an announcement we publish in the Federal Register that we will

prepare and review an environmental impact statement [40 CFR

1508.22]

objective see "unit objective"

obligate species a species that must have access to a particular habitat type to persist

old fields areas formerly cultivated or grazed, where woody vegetation has begun

to invade

[Note: If left undisturbed, old fields will eventually succeed into forest. Many occur at sites marginally suitable for crops or pasture. They vary

markedly in the Northeast, depending on soil and land use and

management history.]

outdoor education educational activities that take place in an outdoor setting

outdoor education project

any cooperative venture that combines financial and staff resources to develop outdoor education activities like labs, field trips, surveys,

monitoring, or sampling

palustrine wetlands the Palustrine system includes all nontidal wetlands dominated by

trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-

derived salts is below 0.5 percent

Partners for Wildlife Program

a voluntary, cooperative habitat restoration program among the Service, other government agencies, public and private organizations, and private landowners to improve and protect fish and wildlife habitat

on private land while leaving it in private ownership

partnership a contract or agreement among two or more individuals, groups of

individuals, organizations, or agencies, in which each agrees to furnish a part of the capital or some service in kind (e.g., labor) for a mutually

beneficial enterprise

passive management protecting, monitoring key resources and conducting baseline inventories to improve our knowledge of the ecosystem

payment in lieu of

taxes

The Federal government, similar to states and local municipalities, is exempt from paying taxes. The Refuge Revenue Sharing Act (16 U.S.C. 715s) as amended, provides for payments to local municipalities

in lieu of taxes, using revenues derived from the sale of products from

refuges.

point source a source of pollution that involves discharge of waste from an

identifiable point, such as a smokestack or sewage-treatment plant

population an interbreeding group of plants or animals. The entire group of

organisms of one species.

population monitoring assessing the characteristics of populations to ascertain their status and establish trends on their abundance, condition, distribution, or other

characteristics

prescribed fire the application of fire to wildland fuels, either by natural or intentional

ignition, to achieve identified land use objectives [FWS Manual 621

FW 1.7]

priority (general) public use a compatible wildlife-dependent recreational use of a refuge involving

hunting, fishing, wildlife observation and photography, or

environmental education and interpretation

private land land owned by a private individual or group or non-government

organization

private organization

any non-government organization

proposed wilderness an area of the Refuge System that the Secretary of the Interior has recommended to the President for inclusion in the National Wilderness

Preservation System

protection mechanisms like fee title acquisition, conservation easements, or

binding agreements with landowners that ensure land use and land management practices will remain compatible with maintaining species

populations at a site (see also "long-term")

public individuals, organizations, and non-government groups; officials of

Federal, State, and local government agencies; Native American tribes, and foreign nations—includes anyone outside the core planning team, those who may or may not have indicated an interest in the issues, and those who do or do not realize that our decisions may affect them

public involvement

offering an opportunity to interested individuals and organizations whom our actions or policies may affect to become informed; soliciting their opinions. We thoroughly study public input, and give it thoughtful consideration in shaping decisions about managing refuges.

public involvement plan

long-term guidance for involving the public in the comprehensive planning process

public land

land owned by the local, State, or Federal Government

rare species

species identified for special management emphasis because of their uncommon occurrence within a watershed

rare community types

plant community types classified as rare by any state program; includes exemplary community types

recharge

refers to water entering an underground aquifer through faults, fractures, or direct absorption

recommended wilderness

areas studied and found suitable for wilderness designation by both the Director (FWS) and Secretary (DOI), and recommended by the President to Congress for inclusion in the National Wilderness System [FWS Manual 610 FW 1.5 (draft)]

Record of Decision

(ROD) a concise public record of a decision by a Federal agency pursuant to NEPA [Note: A ROD includes:

- the decision:
- all the alternatives considered;
- the environmentally preferable alternative;
- a summary of monitoring and enforcement, where applicable, for any mitigation; and,
- whether all practical means have been adopted to avoid or minimize environmental harm from the alternative selected (or if not, why not).]

refuge goals

"descriptive, open-ended, and often broad statements of desired future conditions that convey a purpose but do not define measurable units" (Writing Refuge Management Goals and Objectives: A Handbook, FWS January 2004)

refuge purposes

"the terms 'purposes of the refuge' and 'purposes of each refuge' mean

the purposes specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, refuge unit, or refuge subunit" (National Wildlife Refuge System Improvement Act of 1997)

refuge lands lands in which the Service holds full interest in fee title or partial

interest like an easement

regenerating establishing a new age class. Silviculture does this in a way that

controls the species composition, seedling density, and other characteristics consistent with the landowner's objectives.

relatively intact the conservation status category indicating the least possible disruption

of ecosystem processes. Natural communities are largely intact, with species and ecosystem processes occurring within their natural ranges

of variation.

relatively stable the conservation status category between vulnerable and relatively

intact in which extensive areas of intact habitat remain, but local

species declines and disruptions of ecological processes have occurred

restoration management of a disturbed or degraded habitat that results in the

recovery of its original state [e.g., restoration may involve planting native grasses and forbs, removing shrubs, prescribed burning, or reestablishing habitat for native plants and animals on degraded

grassland.]

riparian referring to the interface between freshwater habitats and the terrestrial

landscape

riparian forest forested land along a stream or river

riparian habitat habitat along the banks of a stream or river [see also note above]

riverine within the active channel of a river or stream

riverine wetlands generally, all the wetlands and deepwater habitats occurring within a

freshwater river channel not dominated by trees, shrubs, or persistent

emergents

rotation the period of time from establishment of an even-aged stand until its

maturity

runoff water from rain, melted snow, or agricultural or landscape irrigation

that flows over a land surface into a water body (see also "urban

runoff")

scale the magnitude of a region or process. Refers to both spatial size, for

example, a (relatively small-scale) patch or a (relatively large-scale) landscape; and a temporal rate—for example, (relatively rapid) ecological succession or (relatively slow) evolutionary speciation

seral stage the series of transitory plant communities that develop during

ecological succession from bare ground to the climax stage

Service presence Service programs and facilities that it directs or shares with other

organizations; public awareness of the Service as a sole or cooperative

provider of programs and facilities

shale play a geologic formation of shale that has the potential to allow commercial

extraction of oil and gas resources.

shrublands habitats dominated by various species of shrubs, often with many

grasses and forbs

silviculture tending and regenerating forest stands to realize sought after benefits

and sustain them over time

site improvement any activity that changes the condition of an existing site to better

interpret events, places, or things related to a refuge [e.g., improving safety and access, replacing nonnative with native plants, refurbishing

footbridges and trailways, and renovating or expanding exhibits.]

small patch communities that form small, discrete areas of vegetation cover.

Individual occurrences of this community type typically range in size from 1 to 50 hectares. Small patch communities occur in very specific ecological settings, such as on specialized landform types or in unusual microhabitats. The specialized conditions of small patch communities, however, are often dependent on the maintenance of ecological

processes in the surrounding matrix and large patch communities. In many ecoregions, small patch communities contain a

disproportionately large percentage of the total flora, and also support a

specific and restricted set of associated fauna (e.g., invertebrates or herpetofauna) dependent on specialized conditions.

source population

a population in a high-quality habitat where the birth rate greatly exceeds the death rate, and the excess individuals emigrate

spatial frame

within an ecoregion, natural terrestrial communities may be categorized into three functional groups on the basis of their current or historical patterns of occurrence, as correlated with the distribution and extent of landscape features and ecological processes. These groups are identified as matrix communities, large patch communities, and small patch communities.

special focus area

an area of high biological value

[Note: We normally direct most of our resources to SFAs that were delineated because of: the presence of Federal-listed endangered and threatened species, species at risk (formerly, "candidate species"), rare species, concentrations of migrating or wintering waterfowl, or shorebird stopover habitat; their importance as migrant landbird stopover or breeding habitat; the presence of unique or rare communities; or the presence of important fish habitat.]

species

the basic category of biological classification intended to designate a single kind of animal or plant. Any variation among the individuals may be regarded as not affecting the essential sameness, which distinguishes them from all other organisms.

species assemblage

the combination of particular species that occur together in a specific location and have a reasonable opportunity to interact with one another

species at risk

a general term referring to species listed under the Federal Endangered Species Act (ESA), as well as for unlisted species that are declining in population. Sometimes the term is used interchangeably with "species of concern." Such species, unless already listed under ESA, receive no legal protection and use of the term does not necessarily imply that a species will eventually be proposed for listing (Source: http://www.fws.gov/endangered/glossary.html).

species of concern

an informal term referring to a species that might be in need of conservation action. This may range from a need for periodic monitoring of populations and threats to the species and its habitat, to the necessity for listing as threatened or endangered under the

Glos-23

Endangered Species Act. Such species receive no legal protection and use of the term does not necessarily imply that a species will eventually

be proposed for listing (Source:

http://www.fws.gov/endangered/glossary.html).

species diversity usually synonymous with "species richness," but may also include the

proportional distribution of species

species richness a simple measure of species diversity calculated as the total number of

species in a habitat or community

stand an area of trees with a common set of conditions (e.g., based on age,

density, species composition, or other features) that allow a single

management treatment throughout

state agencies natural resource agencies of state governments

state land state-owned public land

state-listed species see also "federally listed species"

step-down

a plan for dealing with specific refuge management subjects, strategies, management plan and schedules, e.g., cropland, wilderness, and fire [FWS Manual 602

FW 1.4]

stopover site habitat where birds rest and feed during migration

a specific action, tool, technique, or combination of actions, tools, and strategy

techniques for meeting unit objectives

strategic management the continual process of inventorying, choosing, implementing, and

evaluating what an organization should be doing

succession the natural, sequential change of species composition of a community

in a given area

surface water all waters whose surface is naturally exposed to the atmosphere, or

wells or other collectors directly influenced by surface water

sustainable development

Glossary

the attempts to meet economic objectives in ways that do not degrade the underlying environmental support system. Note that there is

considerable debate over the meaning of this term...we define it as "human activities conducted in a manner that respects the intrinsic value of the natural world, the role of the natural world in human wellbeing, and the need for humans to live on the income from nature's capital rather than the capital itself."

terrestrial living on land

territory an area over which an animal or group of animals establishes

jurisdiction

thinning reducing the density of trees in a stand primarily to improve the growth

and condition of residual trees and prevent mortality. The term

describes treatments in immature even-aged stands that do not attempt

to establish regeneration.

threatened species a Federal-listed, protected species that is likely to become an

endangered species in all or a significant portion of its range

tiering incorporating by reference the general discussions of broad topics in

environmental impact statements into narrower statements of

environmental analysis by focusing on specific issues

[40 CFR 1508.28]

tributary a stream or river that flows into a larger stream, river, or lake, feeding it

water

turbidity refers to the extent to which light penetrates a body of water. Turbid

waters are those that do not generally support net growth of photo-

synthetic organisms.

understory the lower layer of vegetation in a stand, which may include short trees,

shrubs, and herbaceous plants

uneven-aged a stand having three or more age classes of trees with distinctly

different ages

unfragmented

habitat

large, unbroken blocks of a particular type of habitat

unit objective desired conditions that must be accomplished to achieve a desired

outcome

[Note: Objectives are the basis for determining management strategies, monitoring refuge accomplishments, and measuring their success. Objectives should be attainable, time-specific, and stated quantitatively or qualitatively (FWS Manual 602 FW 1.4).]

upland

dry ground (i.e., other than wetlands)

urban runoff

water from rain, melted snow, or landscape irrigation flowing from city streets and domestic or commercial properties that may carry pollutants into a sewer system or water body

vision statement

a concise statement of what the unit could achieve in the next 10 to 15 years

watchable wildlife program

[Note: A watchable wildlife program is one that helps maintain viable populations of all native fish and wildlife species by building an active, well informed constituency for conservation. Watchable wildlife programs are tools for meeting wildlife conservation goals while at the same time fulfilling public demand for wildlife-dependent recreational activities (other than sport hunting, sport fishing, or trapping).]

watershed

the geographic area within which water drains into a particular river, stream, or body of water. A watershed includes both the land and the body of water into which the land drains.

watershed networks

systems for sharing educational information, like curriculum development projects, student activities, and ongoing data gathering; a combination of telecommunications and real-life exchanges of information

wetlands

lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. These areas are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions.

wilderness study areas

lands and waters identified by inventory as meeting the definition of wilderness and being evaluated for a recommendation they be included in the Wilderness System (see also "recommended wilderness")
[Note: A wilderness study area must meet these criteria:

1. generally appears to have been affected primarily by the forces of

- nature, with the imprint of man's work substantially unnoticeable;
- 2. has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
- 3. has at least 5,000 contiguous, roadless acres, or sufficient size to make practicable its preservation and use in an unimpaired condition. (FWS Manual 610 FW 1.5 (draft)).]

wilderness

see also "designated wilderness"

wildfire

a free-burning fire requiring a suppression response; all fire other than prescribed fire that occurs on wildlands [FWS Manual 621 FW 1.7]

wildland fire

every wildland fire is either a wildfire or a prescribed fire [FWS Manual 621 FW 1.3]

wildlife-dependent recreational use

a use of a national wildlife refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation (National Wildlife Refuge System Administration Act of 1966)

wildlife management

manipulating wildlife populations, either directly by regulating the numbers, ages, and sex ratios harvested, or indirectly by providing favorable habitat conditions and alleviating limiting factors

wildlife-oriented recreation

recreational activities in which wildlife is the focus of the experience ["The terms 'wildlife-dependent recreation' and 'wildlife-dependent recreational use' mean a use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation."—National Wildlife Refuge System Improvement Act of 1997]

Acronyms

ACRONYM	FULL NAME		
ACJV	Atlantic Coast Joint Venture		
ADA	Americans with Disabilities Act		
AHWP	Annual Habitat Work Plan		
AOI	Area of Interest		
AP	Atlantic Population (Canada geese)		
ARPA	Archeological Resources Protection Act of 1960		
ATV	All-terrain vehicle		
BBS	Breeding Bird Survey		
BCC	Birds of Conservation Concern		
BCR	Bird Conservation Region		
BIDEH	Biological integrity, diversity, and environmental health		
BMP	Best management practice		
CAA	Clean Air Act		
CATEX	Categorical exclusion		
CCC	Civilian Conservation Corps		
CCMP	Comprehensive Conservation and Management Plan		
CCP	Comprehensive Conservation Plan		
CEQ	Council on Environmental Quality		
CFR	Code of Federal Regulations		
CWCS	Comprehensive Wildlife Conservation Strategy		
CWD	Chronic wasting disease		
DDT	Dichlorodiphenyltrichloroethane (pesticide)		
DMAP	Deer Management Assistance Program		
\mathbf{DU}	Ducks Unlimited		
EA	Environmental assessment		
EE	Environmental education		
EIA	U.S. Energy Information Administration		
EPA	U.S. Environmental Protection Agency		
ESA	Federal Endangered Species Act		
FmHA	Farmers Home Administration		
FONSI	Finding of No Significant Impact		
FTE	Full time equivalent		
FY	Fiscal year		

Acronyms Glos-27

Agnovers	Dvv Nines		
ACRONYM	FULL NAME		
GAO	U.S. General Accounting Office		
GHG	Greenhouse gas		
GIS	Geographic information system		
GTR	Green tree reservoir		
HMP	Habitat management plan		
IBA	Important Bird Area		
IMP	Inventory and monitoring plan		
IPCC	Intergovernmental Panel on Climate Change		
IPM	Integrated pest management		
LCC	Landscape Conservation Cooperative		
LE	Law enforcement		
LWCF	Land and Water Conservation Fund		
LPP	Land protection plan		
MAC	Montezuma Audubon Center		
MANEM	Mid-Atlantic/New England/Maritimes region		
MAPS	Monitoring avian productivity and survivorship		
MARSH!	Montezuma Alliance for the Restoration of Species and Habitats		
MBCF	Migratory Bird Conservation Fund		
MBTA	Migratory Bird Treaty Act		
MOA	Memorandum of Agreement		
MOU	Memorandum of Understanding		
MWC	Montezuma Wetlands Complex		
NABCI	North American Bird Conservation Initiative		
NAI	National Association for Interpretation		
NAS	National Audubon Society		
NAWCP	North American Waterbird Conservation Plan		
NAWMP	North American Waterfowl Management Plan		
NEPA	National Environmental Policy Act of 1969		
NGO	Non-governmental organization		
NHCR	National State Agency Herpetological Conservation Report		
NHPA	National Historic Preservation Act of 1966		
NNL	National Natural Landmark		
NOA	Federal Register Notice of Availability		
NOAA	National Oceanic and Atmospheric Administration		

ACRONYM	FULL NAME	
NOI	Federal Register Notice of Intent	
NPS	National Park Service	
NRCS	Natural Resources Conservation Service	
NWR	National wildlife refuge	
NWPS	National Wilderness Preservation System	
NWRS	National Wildlife Refuge System	
NYDEC	New York Department of Environmental Conservation	
NYDOT	New York Department of Transportation	
NYES	New York Ecological Services	
NYS	New York State	
NYSWAP	New York State Wildlife Action Plan	
ORV	Off-road vehicle	
PCB	Polychlorinated biphenyl (pesticide)	
PEB	Proposed Expansion Boundary	
PIF	Partners in Flight	
RAPP	Refuge Annual Performance Plan	
RHPO	Regional Historic Preservation Office	
RNA	Research Natural Area	
RONS	Refuge Operations Needs System	
SAMMS	Service Assist Maintenance Management System	
SCA	Student Conservation Association	
SCEP	Student Career Experience Program	
SELO	Southeast Lake Ontario	
SGCN	Species of Greatest Conservation Need	
STEP	Student Temporary Employment Program	
SHC	Strategic Habitat Conservation	
SHPO	State Historic Preservation Office	
SUP	Special use permit	
SWG	State Wildlife Grant Programs	
THPO	Tribal Historic Preservation Officers	
TNC	The Nature Conservancy	
UMGL	Upper Midwest/Great Lakes	
UMVGL	Upper Mississippi Valley/Great Lakes	
USDA	U.S. Department of Agriculture	

Acronyms Glos-29

ACRONYM	FULL NAME
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WMA	Wildlife Management Area